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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/363,823	07/30/1999	KAZUHIRO NAKATA	862.2957	8593
5514	7590	01/12/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LAMB, TWYLER MARIE	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/363,823

**Applicant(s)**

NAKATA, KAZUHIRO

**Examiner**

Twyler M. Lamb

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11 and 18-25 is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (US 5,838,888) in view of Akiyama et al. (Akiyama) (US 5,222,818).

In regards to claims 12 and 14, Oda discloses a data processing method and apparatus (Figure 5; printer 7, col 3, lines 26-27) for processing data (Figure 5, print buffer 18) in an image printing apparatus (Figure 5, printer 7) which performs printing by causing a printhead (Figure 5, printing head 21) to scan (col 3, lines 39-45; col 4, lines 12-22), said printhead having a plurality of print elements arrayed at predetermined angles with respect to the scanning direction of the printhead (col 3, lines 51-54; col 4, lines 12-15) and subjected to time-division drive (col 3, line 64 - col 4, line 8), comprising a step of: rearranging the data in such a manner that one or more address regions in the print buffer are occupied with one word of data (which reads on receiving the data in a serial format and converting it to a parallel format to the print buffer circuits, and the data being provided in a data storage table and the table being divided into data areas of 8 bits, which according to the specification page 7, lines 17-19 represents one word) (col 3, line 64 - col 4, line 11; Figures 9B and 9C, col 4, lines 59-61) corresponding to a plurality of contiguous print elements provided on a printhead, that is

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stored in two or more address regions within an editing buffer, is arranged in one address region within a print buffer (which reads on distributing the print data for each dot to the corresponding channels of the printing elements) (col 1, lines 26-30; col 5, lines 12-21).

While Oda clearly performs editing and printing, Oda differs from claims 12 and 14, in that he does not clearly teach having an editing buffer and a print buffer.

Akiyama discloses a printer in which RAM 57 provides the memory for functions of an editing buffer (58) and a print buffer (60) (col 6, lines 12-13).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Oda to include having an editing buffer and a print buffer as taught by Akiyama. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Oda by the teaching of Akiyama to provide storage space for editing data and print data to be stored as taught by Akiyama in col 6, lines 12-13.

In regards to claims 13 and 16, Oda also discloses wherein the print element comprises a nozzle to discharge ink (Figure 5, printing head 21, Figure 3, nozzles 21a, col 3, lines 51-54).

In regards to claim 15, Oda also discloses comprising: first storage means for storing data of a plurality of words (which reads on the data being provided in a data storage table with 64 rasters formed on the print buffer in a matrix form) (Figures 9B-9C, col ; 4, lines 53-59) and delay means for delaying an amount of data that corresponds to a whole-number multiple of a number of time divisions employed in time-division drive,

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said delayed data being from the data that has been read out of said first storage means ({printing clock}, col 5, lines 10-26).

***Allowable Subject Matter***

3. Claims 1-11, 18-25 are allowed.

***Response to Arguments***

4. Applicant's arguments with respect to claims 13-16 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler M. Lamb whose telephone number is 703-308-8823. The examiner can normally be reached on M-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Twyler M. Lamb

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